

Abstract

A method is proposed for vacuum-coating a substrate using a plasma-CVD method. In order to control the ion bombardment during the coating, a substrate voltage (US), produced independently from the coating plasma (20), is applied to the substrate, this voltage being modified during the coating. The substrate voltage (US) is usefully a direct voltage that is pulsed in bipolar fashion with a frequency of 0.1 kHz to 10 MHz. Moreover, a wear-resistant and friction-reducing multilayer structure of alternating hard material individual layers and carbon or silicon individual layers is proposed.